Guidelines for Data Visualization and Analysis Project

About the Project:

In this project, you will be working with a dataset from the Superstore, aiming to answer 30 scenario-based questions through data visualisation and analysis. Your objective is to select the best chart for each question, explain your choice. This project will showcase your proficiency in data visualisation, critical thinking, and effective communication.

Skills Required:

- Proficiency in data visualisation concepts and techniques.
- Familiarity with Tableau or a similar data visualisation tool.
- Strong analytical and problem-solving skills.
- Ability to choose appropriate charts based on data characteristics and question requirements.
- Clear and concise communication skills.

Deliverables:

- A Google document containing solutions to the scenario based questions including the screenshot of relevant charts picked for each scenario, presented in a concise and well-structured format. Make sure to provide explanations that highlight your problem-solving skills.

Rubrics for Assessment:

Question Responses:
- Accuracy and completeness of answers for all 30 questions.
- Clear and concise explanations that address the question's context.

Chart Selection and Explanation:
- Thoughtful rationale for choosing specific chart types.
- Justification based on data characteristics, context, and communication goals.

Creative Enhancements:
- Effective use of creative elements to enhance visualisation quality.
- Enhancements that contribute to better understanding or engagement.

Note:
- Duplicate this document and proceed to write your solutions.
- For each scenario and question, provide a justification for the choice of chart type. Explain why it is the best option to visualise the data effectively.
- Attach screenshots of the charts you have created in Tableau for each scenario and question using the Superstore dataset. Label them clearly to match the corresponding questions in the Google Document.
- Submit the duplicated google doc file after completion.

Use these guidelines to structure your data visualisation and analysis project. Remember to maintain consistency in your responses, explanations, and visualisation styles. This project will not only demonstrate your skills but also your ability to effectively communicate complex information through visualisations. Good luck!

Problem Statement: Choose the Best chart for any 30 scenario based questions from Superstore Dataset.

Imagine you are a data enthusiast aiming to excel in data visualisation and analysis. In this task, you have been given any 30 scenario-based questions derived from the Superstore dataset, and your objective is to provide insightful answers using appropriate charts. For each question, you need to select a chart that best represents the data, explain why you chose that specific chart, and then proceed to build the chosen chart using Tableau.

Your responses should be succinct, organised, and illustrative of your problem-solving capabilities.

Dataset Link:

https://community.tableau.com/s/question/0D54T00000CWeX8SAL/sample-superstore-sales-excelxls

Please keep in mind:

1. **Answer Completion**: Ensure that you furnish answers for all 30 questions and build charts for them.
2. **Encouraged Creativity**: Don't hesitate to employ visuals, creative elements, or any other innovative approaches to enhance the quality of your responses.

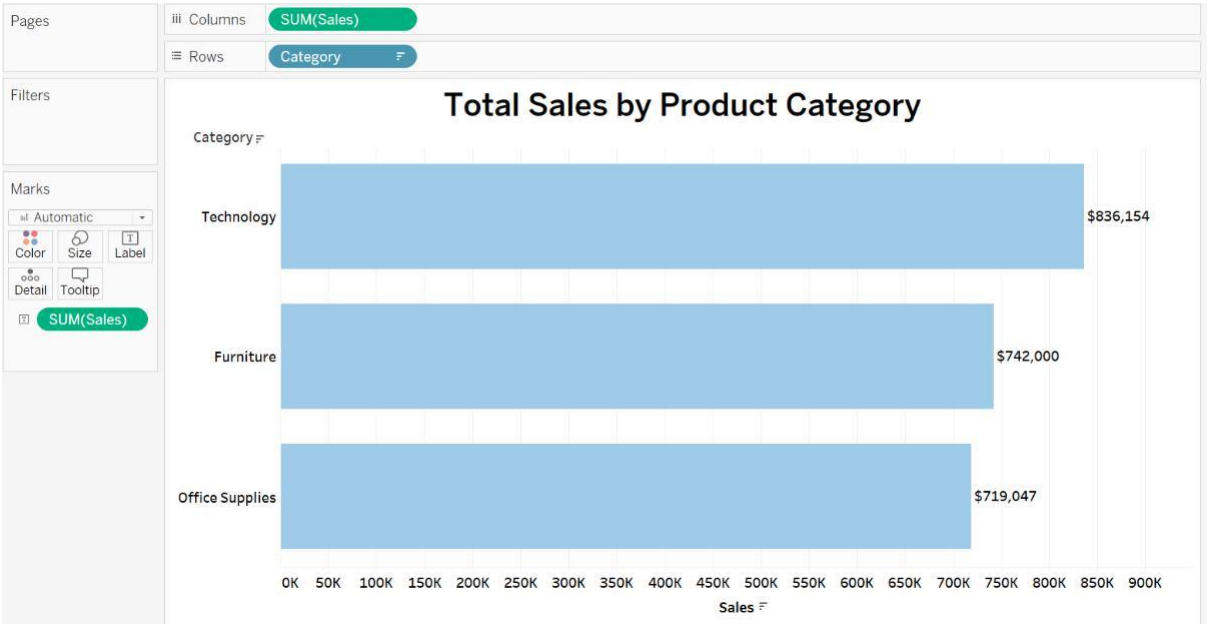
By completing this task effectively, you'll not only demonstrate your proficiency in data visualisation and analysis but also showcase your ability to effectively communicate complex concepts through both text and charts.

Good luck!

Questions:

1. **Which product categories have the highest total sales in the "Superstore" dataset?**

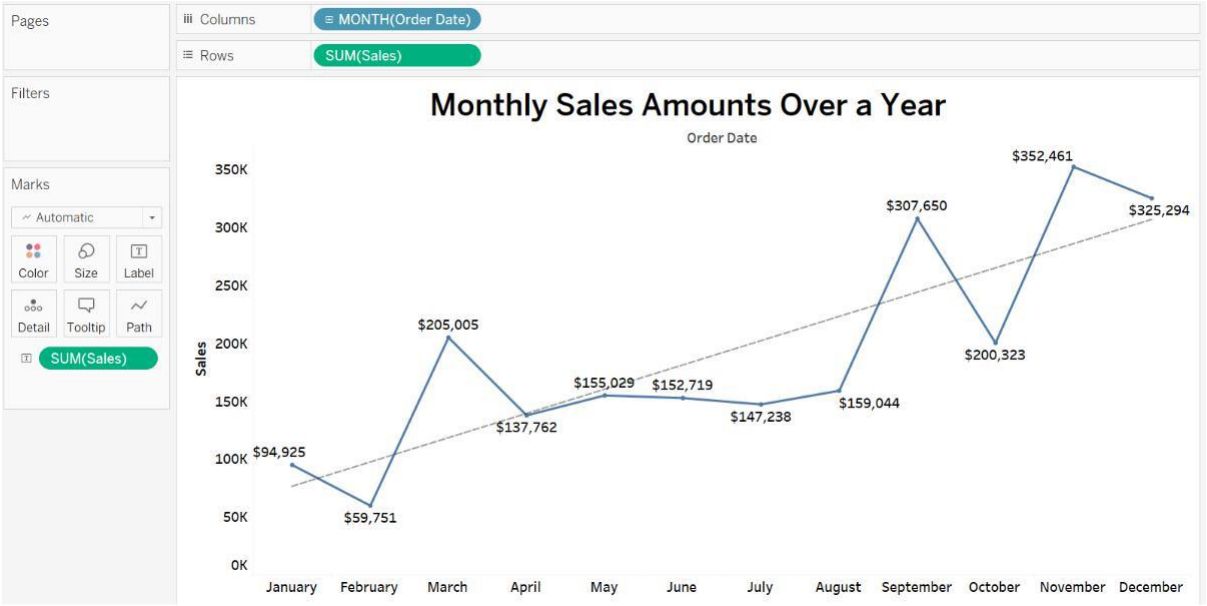
Answer :



The horizontal bar chart shines when dealing with lengthy category labels like "Technology," "Furniture," and "Office Supplies."
This format effortlessly showcases the hierarchy of sales, making it easy for viewers to discern which category leads and which lags.
The simplicity of the chart's design ensures swift comprehension, highlighting at a glance that Technology dominates in sales, followed by Furniture and then Office Supplies.
Furthermore, the chart's scalability makes it suitable for various display mediums and the inclusion of additional data points.
Its adaptability across different platforms and ability to accommodate extra data points further underscores its effectiveness in visualizing information.

2. How do the monthly sales amounts change over the course of a year?

Answer :



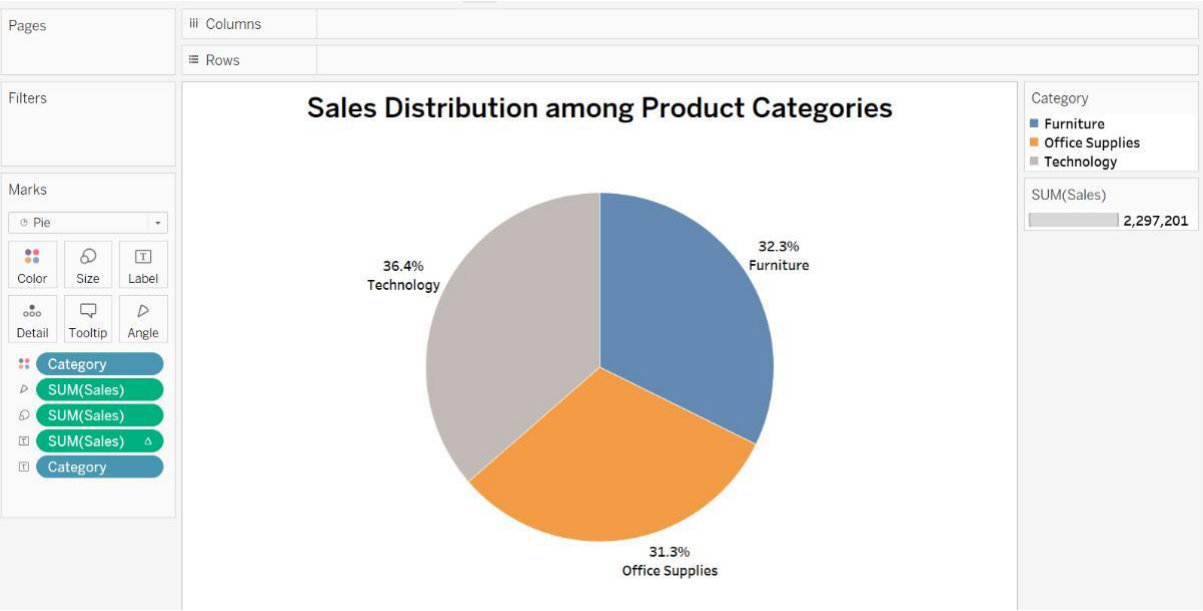
A line chart excels in portraying the fluctuations in monthly sales throughout a year, as it effectively displays the significant fluctuations and trends in the data.

It paints a vivid picture of the sales journey over time: starting with modest figures early in the year, peaking in March, dipping during the summer months, then climbing to another high in September before fluctuating towards the year's end.

The trend line underscores a general uptrend in sales over the year. This visualization effectively narrates the story of sales performance, showcasing the peaks and valleys, and emphasizing the changing dynamics of monthly sales across the year.

3. How is the total sales amount distributed among different product categories?

Answer :



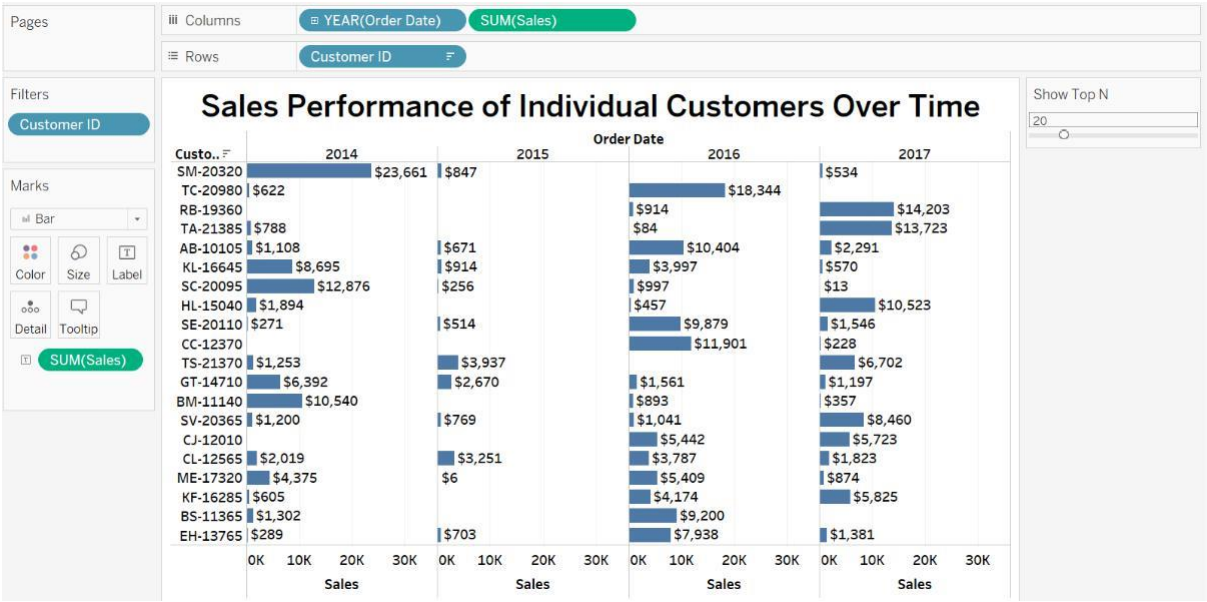
A pie chart is like a visual snapshot showing how sales are divided among different product categories. Imagine a pie sliced into parts, where each slice represents a category's share of the total sales.

In this case, Technology grabs the biggest slice at 36.4%, followed closely by Furniture at 32.3%, and Office Supplies at 31.3%. It's great for quickly grasping which category dominates and by how much.

The percentages attached to each slice give precise info on their contribution, making it easy to compare. So, if you want a quick, clear view of sales distribution, the pie chart is your go-to.

4. Can we analyse the sales performance of individual customers over time?

Answer :



The horizontal bar chart is perfect for showcasing how individual customers perform in terms of sales, especially when you're keeping track of this data over time.

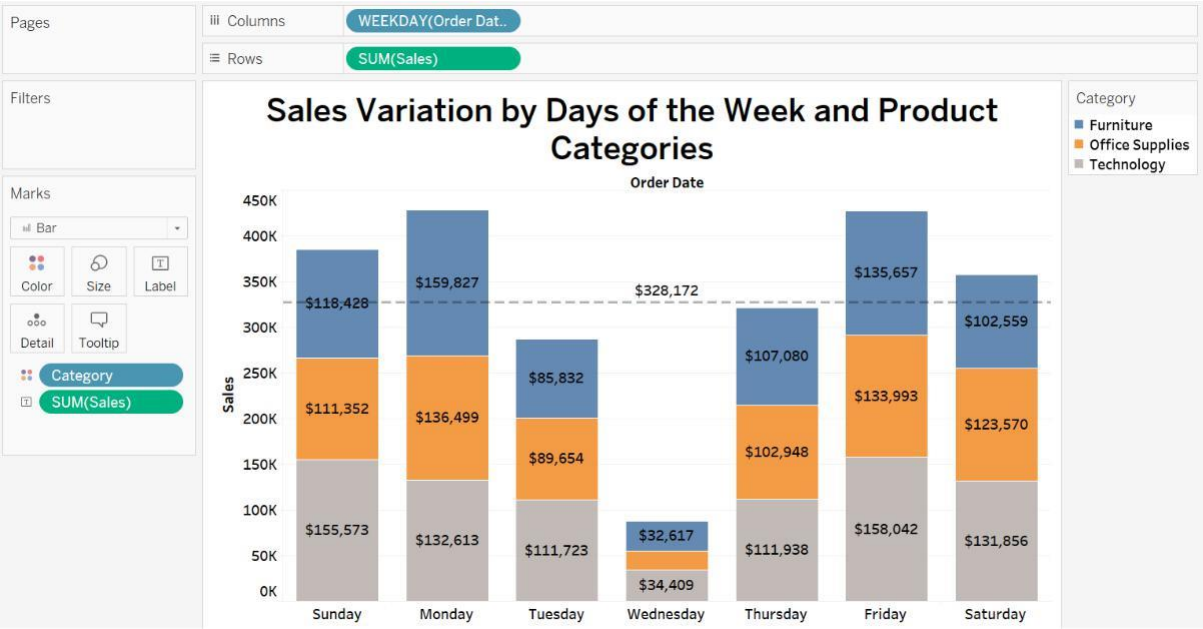
It's great at letting you compare sales figures between different customers because it's easier to read, especially when you have longer labels like customer IDs. Plus, the layout helps you see how sales change over time for each customer, making trends clear along the horizontal axis.

By adding a feature that lets you focus on the top-performing customers, you can customize the chart to fit your needs perfectly without making it too cluttered.

This mix of clarity, readability, and flexibility makes the horizontal bar chart the top choice for this kind of information.

5. How do sales vary based on different days of the week and product categories?

Answer :



The stacked bar chart serves as a strategic choice for visualizing sales dynamics across weekdays and product categories due to its capacity for facilitating a nuanced comparison of both overall and category-specific performance within a single chart.

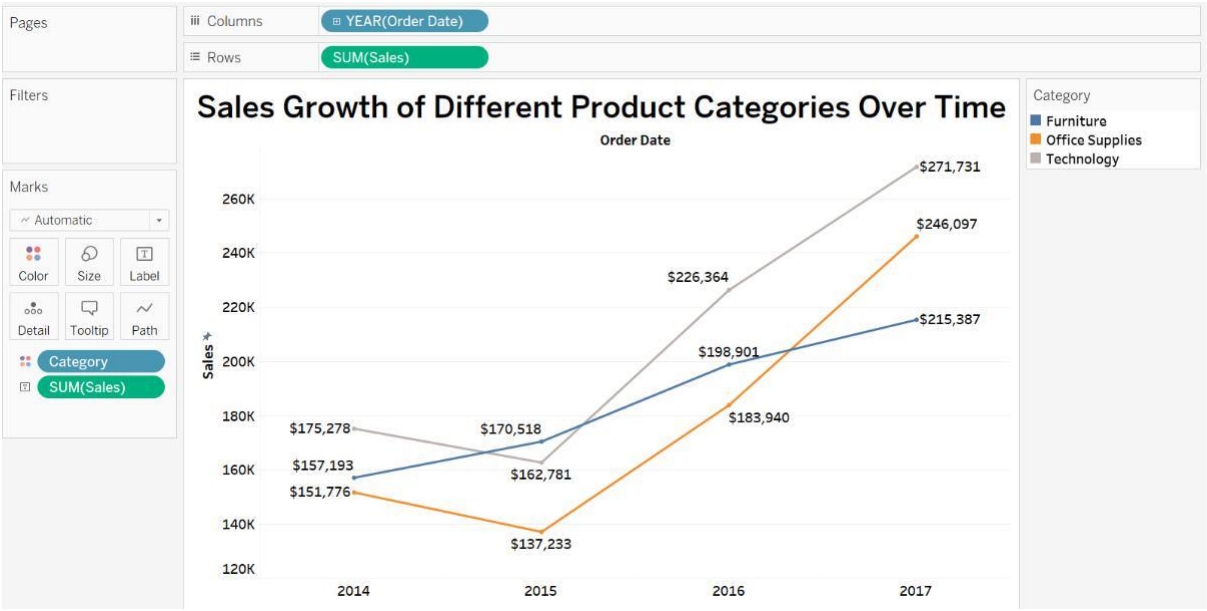
Each bar, representing a weekday, offers a straightforward overview of total sales, while the segmented layers within each bar delineate sales figures for distinct product categories, enabling a granular analysis of their respective contributions to daily totals.

This dual-tiered structure enables swift insights into overarching trends and category-specific patterns, such as identifying peak sales days or discerning dominant product categories on specific weekdays.

Furthermore, the color-coded distinction of each category enhances visual clarity, aiding in seamless differentiation. The inclusion of a reference line depicting average weekly sales offers additional context, revealing days performing below or above average, notably highlighting Monday and Friday as standout performers. In essence, this visualization method excels in illustrating the compositional makeup of sales data across both temporal and categorical dimensions, rendering it invaluable for comprehensive analysis of such datasets.

6. Can we visualise the sales growth of different product categories over time?

Answer :



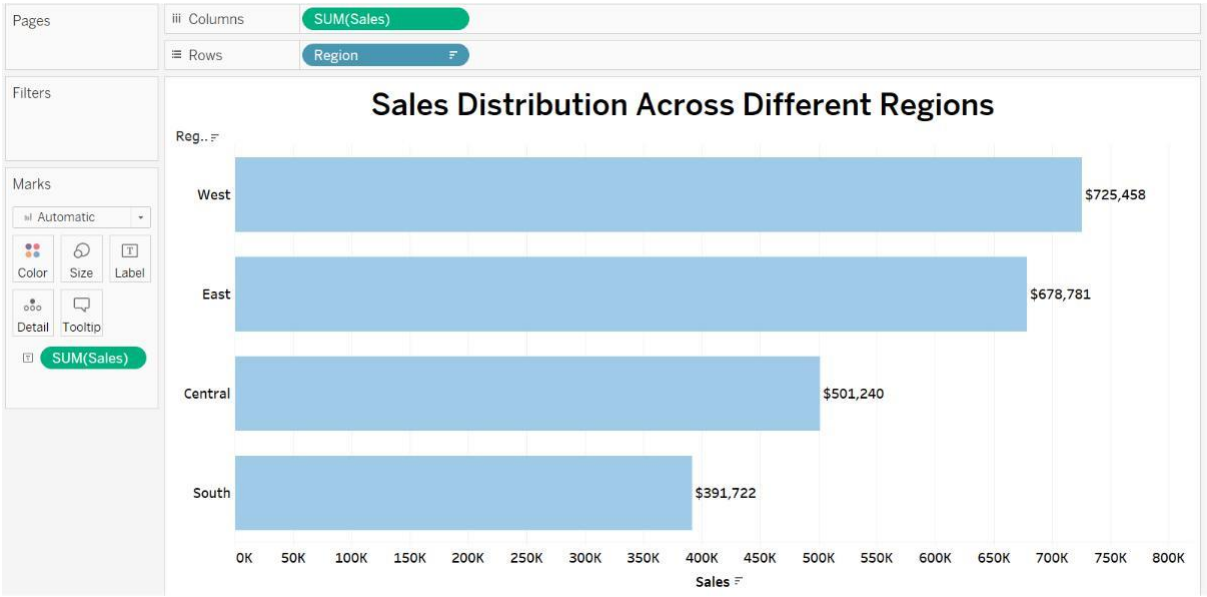
The line chart is like a roadmap for tracking how sales of different types of products change over time. Each line represents a product category, and you can see if sales are going up or down by how the line moves. The colors help you compare categories easily.

If a line goes up quickly, it means sales are increasing rapidly. This chart is great for seeing trends over time, like if sales are growing steadily or if there are big jumps or drops. For example, from 2014 to 2017, sales of Furniture, Office Supplies, and Technology went up. Technology had the biggest jump, especially in 2016 and 2017, showing it's really popular. Office Supplies had a steady increase, meaning people are buying them consistently.

But Furniture's growth was slower, which might mean we need to do something to sell more furniture. Looking at these trends, it seems like Technology is making the most money, so we might want to focus more on that. And maybe we need to think of new ways to boost Furniture sales.

7. How does the sales distribution vary across different regions in the "Superstore" dataset?

Answer :



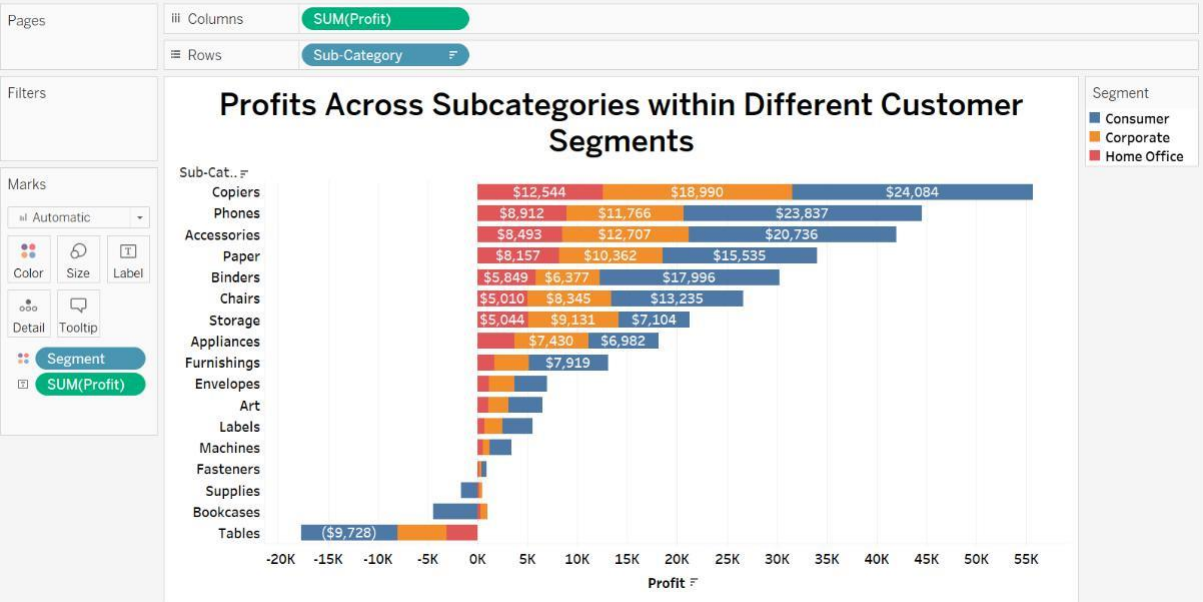
The horizontal bar chart is great for showing how sales are spread out across different areas because it's easy to read. You can quickly compare sales in each region by looking from left to right.

This chart works well, especially when region names are long, as there's plenty of space for them. Since the bars stretch horizontally, it's easier to display big numbers without things getting too cramped. Also, arranging the bars from highest to lowest (or vice versa) helps to see which regions are doing the best or worst in terms of sales.

This type of chart is perfect for comparing a small number of categories, like sales in different regions. In this chart, the West region has the most sales, followed by the East, then the Central, and finally the South region with the least sales.

8. Can we visualise the composition of profits across various subcategories within different customer segments?

Answer :



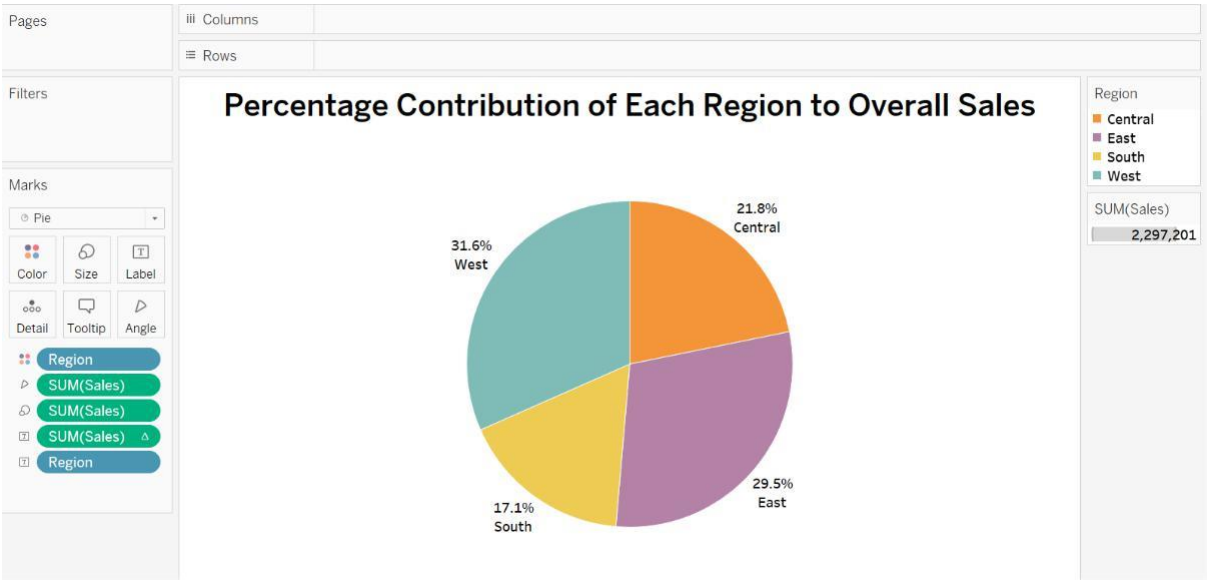
The horizontal stacked bar chart is a smart way to see how profits break down by different types of products and customer groups. Each color represents a different customer group (like Consumer or Corporate), so you can see how much each group contributes to profits in each product category. The chart lays out the data in a way that makes it easy to compare. It handles negative numbers well, so you can spot which product categories are losing money.

Also, it ranks the categories by how profitable they are, helping you quickly see which ones are doing the best or worst. For example, 'Copiers' make a lot of profit, especially from Corporate customers. But 'Tables' and 'Bookcases' are losing money across the board. Consumer sales vary a lot, with 'Phones' and 'Accessories' doing well.

On the other hand, the Home Office segment makes good profits from 'Chairs' and 'Storage', suggesting a strong demand for home office items. These patterns suggest there's room for targeted marketing and improvements in the less profitable areas.

9. What is the percentage contribution of each region to the overall sales?

Answer :



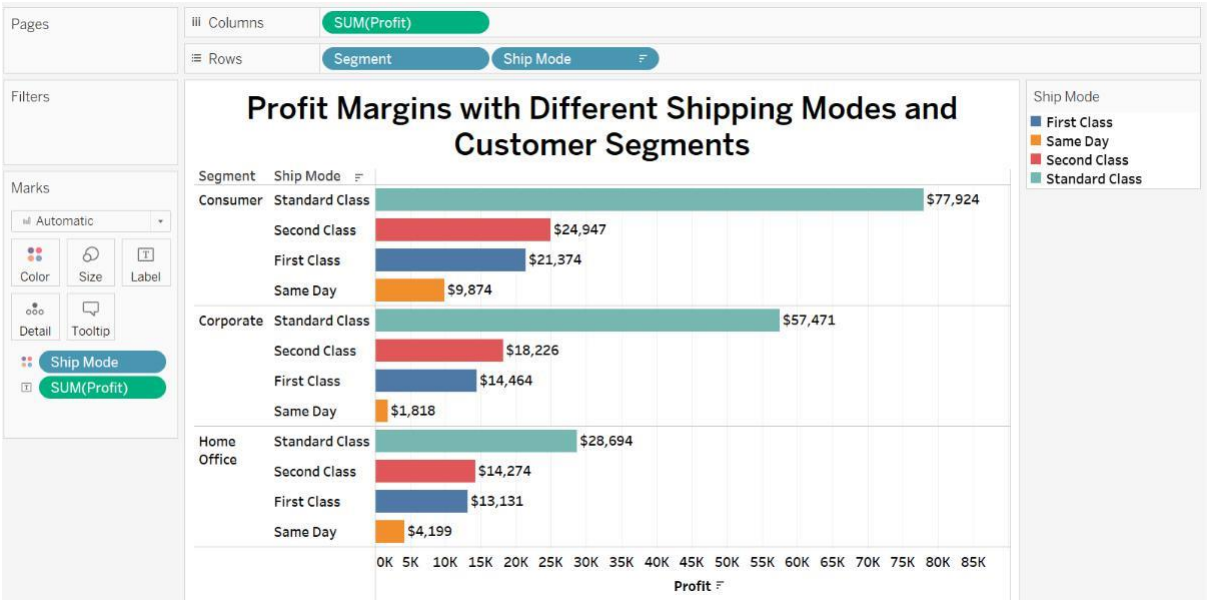
A pie chart is a great way to show how much each region contributes to total sales because it's easy to see the proportions. Each 'slice' represents a region's sales compared to the whole, so you can quickly see which regions are the biggest contributors.

This works well when there are only a few categories, like regions in this case. Plus, labeling each slice with its percentage makes it even clearer.

In this chart, the West region leads with 31.6% of sales, followed by the East with 29.5%, Central with 21.8%, and the South with 17.1%.

10.Can we visualise the profit margins associated with different shipping modes and customer segments?

Answer :



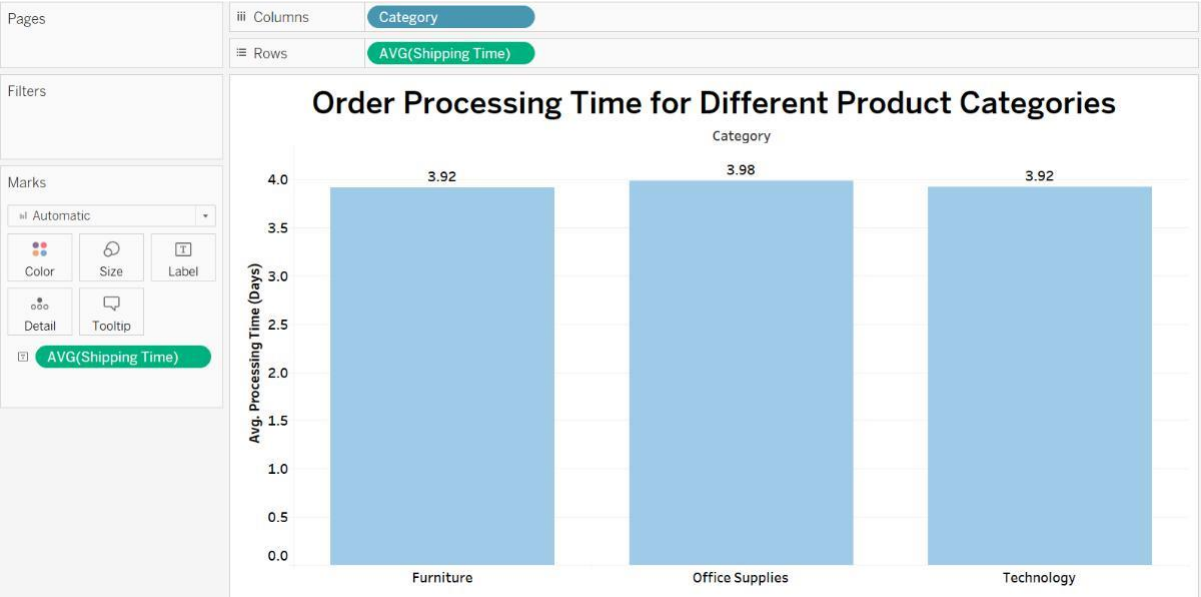
The grouped horizontal bar chart effectively illustrates profit margins by shipping
modes within distinct customer segments. Each horizontal bar, representing a specific segment, is divided by colour to indicate the various shipping modes, making it easy to discern each mode's contribution to overall profits. The chart's clarity is enhanced by its horizontal layout, which accommodates long labels and multiple categories without sacrificing readability.

With consistent and distinct colour-coding, the chart facilitates at-a-glance comparisons and swift identification of trends across segments. The visualisation highlights that Standard Class shipping is the most profitable across all segments, particularly within the Consumer segment which shows the highest margins.

Conversely, Same Day shipping is the least profitable, suggesting potential issues with demand or cost-efficiency that could be addressed to optimise profitability.

11. How long does it take to process orders for different product categories?

Answer :



The vertical bar chart is well-suited for displaying the average order processing time across different product categories, with each bar's height indicating the time taken from order to shipment.

The utilisation of the calculated field 'Shipping Time', representing the day difference between 'Order Date' and 'Ship Date', ensures that the data is specific and relevant to the processing period. This chart type efficiently conveys the average times, facilitating direct comparisons between the categories of Furniture, Office Supplies, and Technology.

The clarity and simplicity of the bar chart, combined with precise numeric labels, make it an effective visualisation tool for conveying the nuances of order processing times within the dataset.

This chart shows a negligible difference in average shipping times among Furniture, Office Supplies, and Technology, all hovering just under four days. This uniformity suggests a standardised order processing system across categories.

With Office Supplies taking a slightly longer average time (3.98 days) compared to Furniture and Technology (both at 3.92 days), there may be a minimal scope for process optimization, particularly in the Office Supplies category, to achieve even greater efficiency.

12. How does the performance of different salespeople compare in terms of actual sales, and profitability?

Answer :

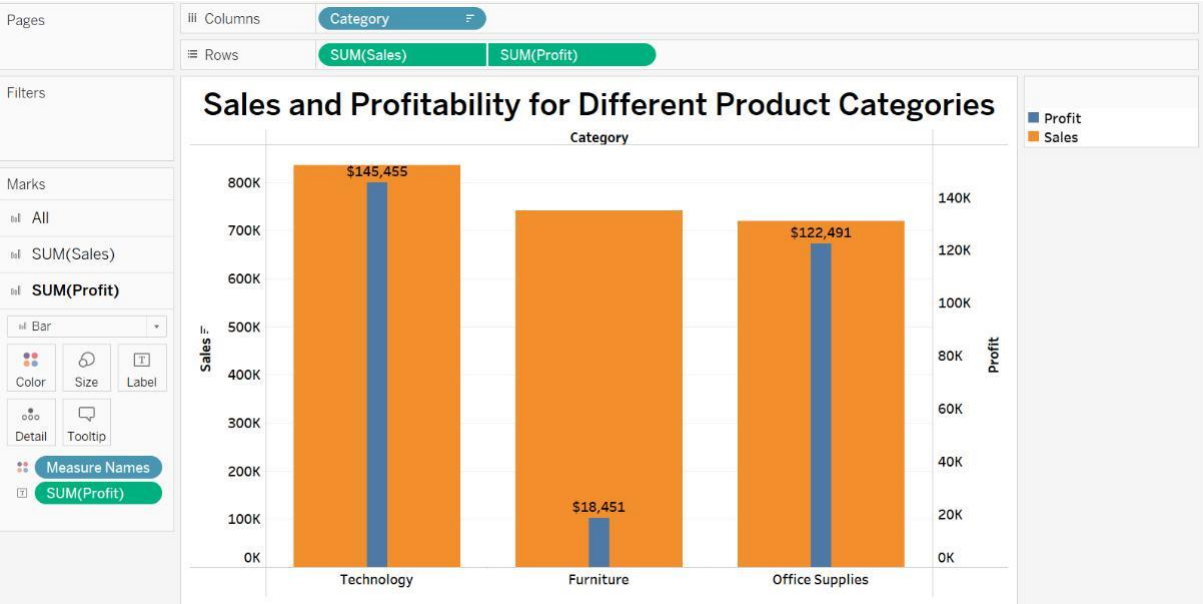
The dual-axis bar chart uses different colors and widths to make it easier to compare the two metrics. Wider bars, usually in a more subdued color, represent total sales, while narrower bars in a contrasting color, overlaid on the sales bars, show profitability. This color contrast highlights profitability within the context of sales.

The different widths help distinguish the metrics, allowing a quick visual comparison of each salesperson's profitability against their sales volumes. Anna Andreadi leads with the highest sales and profitability, showing her efficiency and strong profit margins. Chuck Magee also has strong sales, but his profit ratio is slightly lower, indicating marginally lower conversion efficiency.

Kelly Williams, despite higher sales, has the lowest profitability, suggesting her transactions are less profitable. In contrast, Cassandra Brandow, with the least sales, does not have the lowest profitability, indicating her sales strategy may be more cost-effective, yielding better profit margins relative to her sales volume.

13. Can we visualise the relationship between product sales and profitability for different product categories?

Answer :



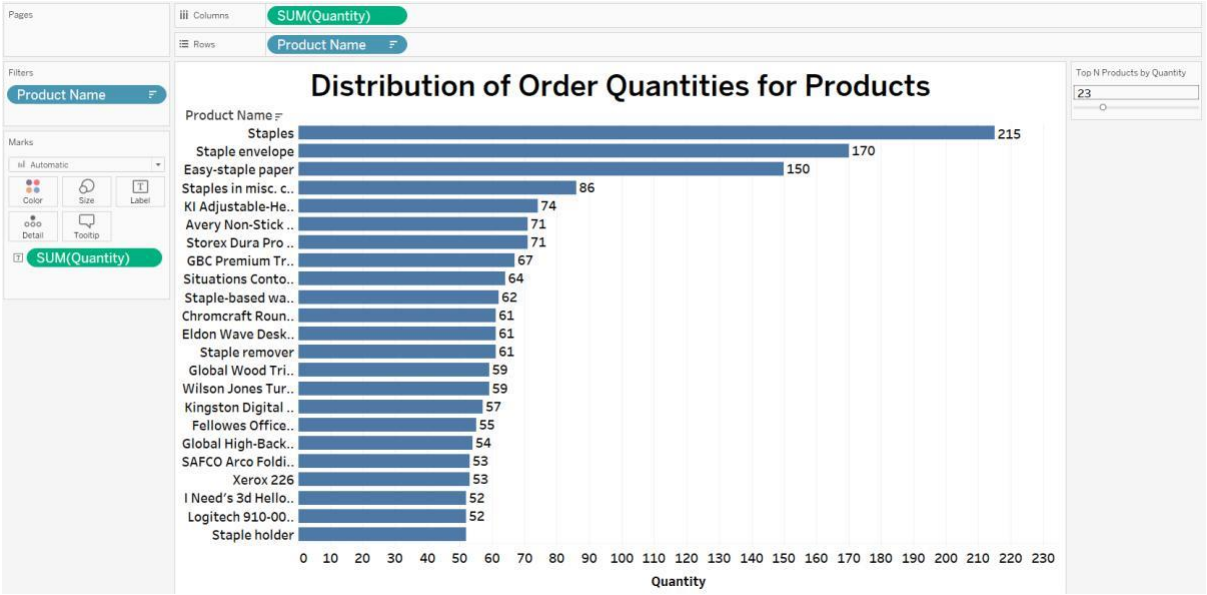
The dual-axis bar chart is particularly effective for visualising the relationship between sales and profitability across product categories because it allows for the comparison of two metrics on the same chart. The primary bars for sales give a clear, comparative view of the revenue generated by each product category, highlighting which categories contribute most to the top line.

The secondary bars for profit, aligned on the same axis, facilitate a direct comparison of the bottom line for each category, showing how revenue translates into actual profit. The differing bar widths prevent overlap and confusion, ensuring each metric stands out distinctly. For Technology, a high level of sales is accompanied by the highest profitability, indicating a strong performance in both aspects.

Furniture shows a considerable volume of sales but with significantly lower profitability, suggesting a disparity between sales success and profit generation. Office Supplies has a moderate sales volume and profitability, which seems consistent with each other, showing a balanced relationship between sales and profit.

14. What is the distribution of order quantities for products in the dataset?

Answer :



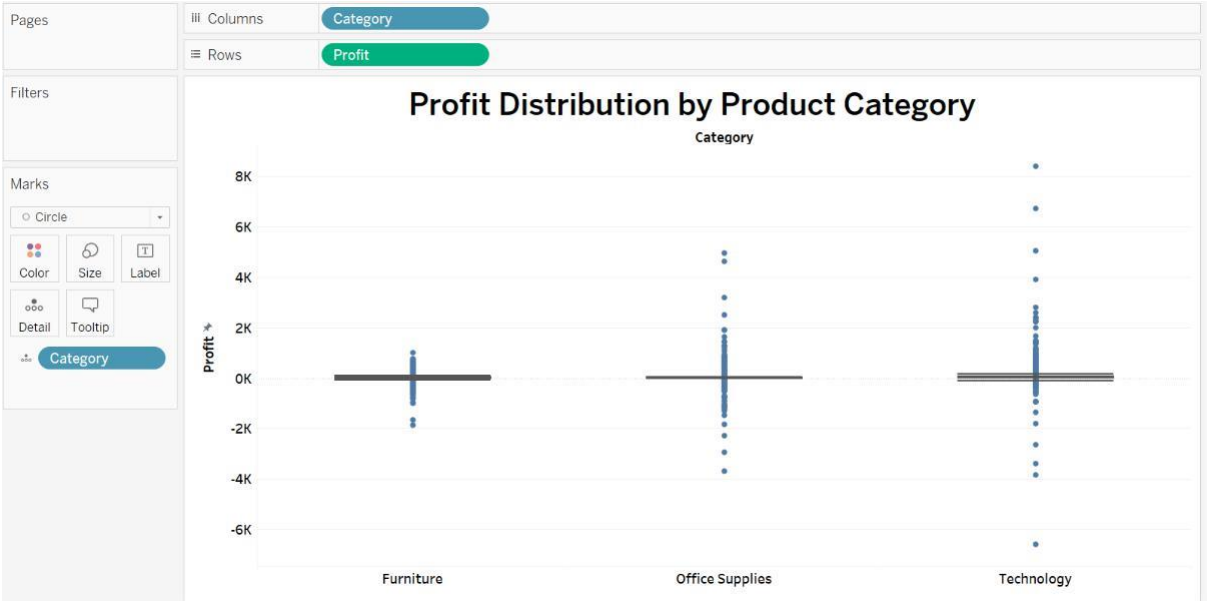
The horizontal bar chart is ideally suited for visualising the distribution of order quantities across products due to its clear layout, which enhances readability for long product names and facilitates easy comparison of data points.

Its adaptability allows for displaying a wide range of values, making it perfect for handling large datasets, while the interactivity introduced by the 'Top N Products by Quantity' parameter enables a focused analysis on the most significant products, optimising both space and interpretive clarity.

This chart highlights that 'Staples', ‘Staple envelope’ and 'Easy-staple paper' are the most ordered products, suggesting high demand or turnover. With a wide variance in order quantities among products, the chart underscores the need for strategic inventory management, especially for high-volume items.

15. How do the profit distributions vary across different product categories?

Answer :



The box-and-whisker plot is a great way to show profit distributions across different product categories because it includes several key statistical measures in one chart. This type of plot shows the median, which is better for understanding the central tendency in skewed distributions than the mean.

It also displays the interquartile range (IQR), which represents the middle 50% of the data, giving a sense of the spread. The "whiskers" extend to show the overall range of the data, and any points outside the whiskers are outliers.

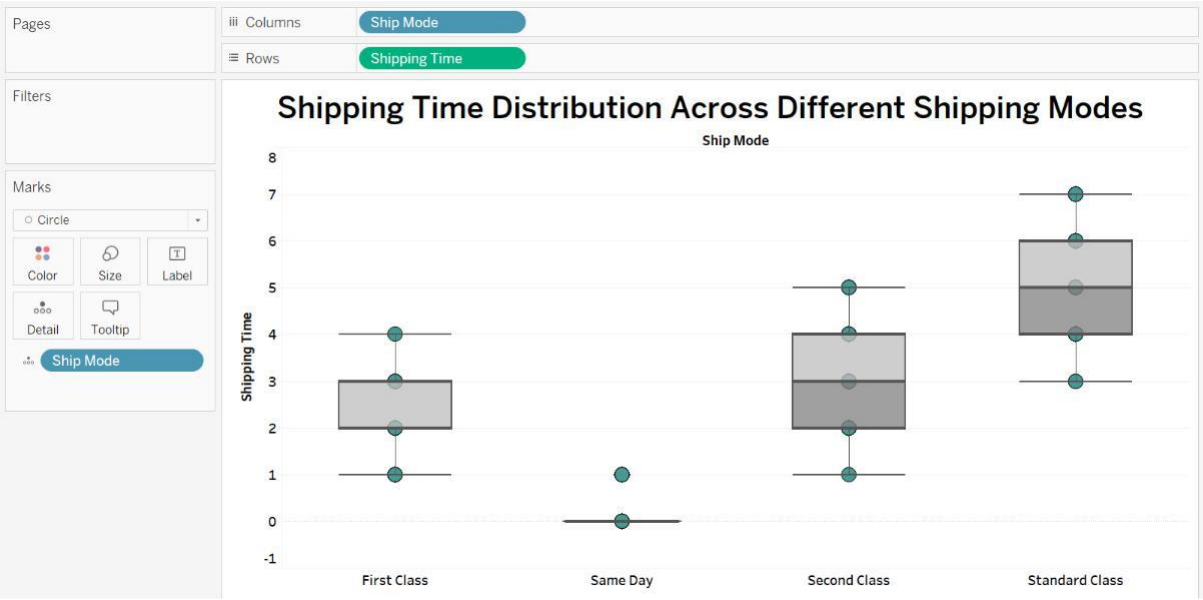
In this plot, we see different profit patterns for Furniture, Office Supplies, and Technology. Technology has a wide range of profits with significant outliers, indicating high variability and the potential for large gains.

Furniture shows potential for losses, as seen by outliers below the profit line. Office Supplies have a more consistent profit range with a median profit lower than Technology, but with fewer losses, suggesting a stable but less lucrative market.

Understanding these variations can help in developing strategies to maximize profits and minimize losses in each product category.

16. Can we compare the shipping time distributions for different shipping modes?

Answer :



The box-and-whisker plot is well-suited for comparing shipping time distributions, as it effectively displays the median, interquartile range, and outliers for each shipping mode in a single view.

It provides a comprehensive comparison of the central shipping time tendencies and the variability within those times, illustrating both typical and extreme shipping durations. This plot displays that First Class exhibits a relatively quick shipping time with a tight interquartile range indicating consistent shipping times.

There are a few outliers that suggest occasional delays beyond the typical shipping time frame. Same Day presents the quickest shipping times, as expected, with a median close to zero. However, the presence of an outlier below zero is likely an anomaly or data entry error since negative shipping time is not feasible. Second Class shows a broader range of shipping times compared to First Class, as indicated by a wider interquartile range.

The median shipping time is higher than First Class, implying slower deliveries. Standard Class has the broadest interquartile range, suggesting the most variability in shipping times. It has the highest median shipping time, indicating it is generally the slowest option. Outliers exist both below and above the box, highlighting some instances of unusually quick and slow deliveries.

17. What is the monthly trend in the number of orders shipped?

Answer :

The line chart is great for showing the monthly trend in the number of orders shipped because it clearly shows how the order volume changes over time.

Line charts are especially good for time series data, where we want to track increases or decreases month by month.

In this line chart, we see a clear pattern in order shipments. There is an increase from January to March, suggesting growth in orders with the new year. February shows a noticeable drop, which could be because it's a shorter month or due to seasonal changes.

There is a peak in June, followed by a drop during the summer months, possibly reflecting seasonal behavior. The chart reaches its highest point in November, likely due to holiday shopping, and then dips slightly in December.

18. How do different customer segments perform in terms of sales and discount rates?

Answer :

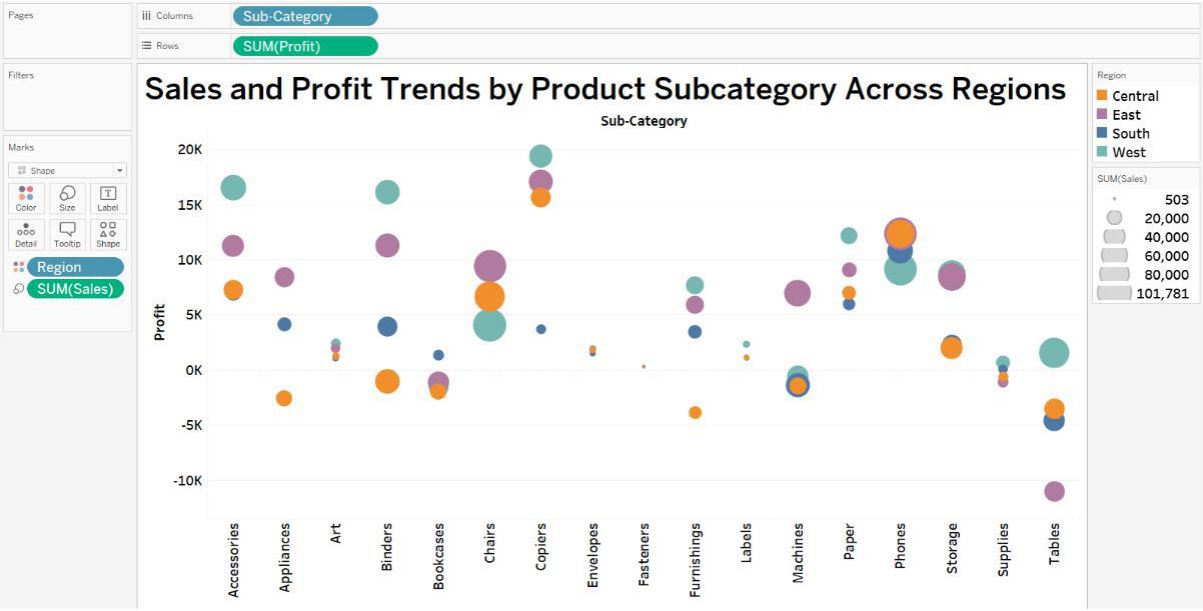
The dual-axis bar chart is well-suited for visualising and comparing the performance of different customer segments in terms of sales and discount rates because it presents two related metrics on the same graph.

The primary bar charts display the total sales, allowing for an easy comparison of the absolute sales figures across customer segments. Superimposed on these are the narrower bars representing the average discount rates, which provide context to the sales figures by showing the discount level associated with each segment's sales.

Overall, the chart suggests a correlation between sales volumes and discount rates, where higher sales volumes are associated with higher discounts. However, the Home Office segment presents an exception to this pattern, maintaining lower discount rates despite lower sales volumes.

19. What are the sales and profit trends across different product subcategories and regions in the Superstore dataset?

Answer :



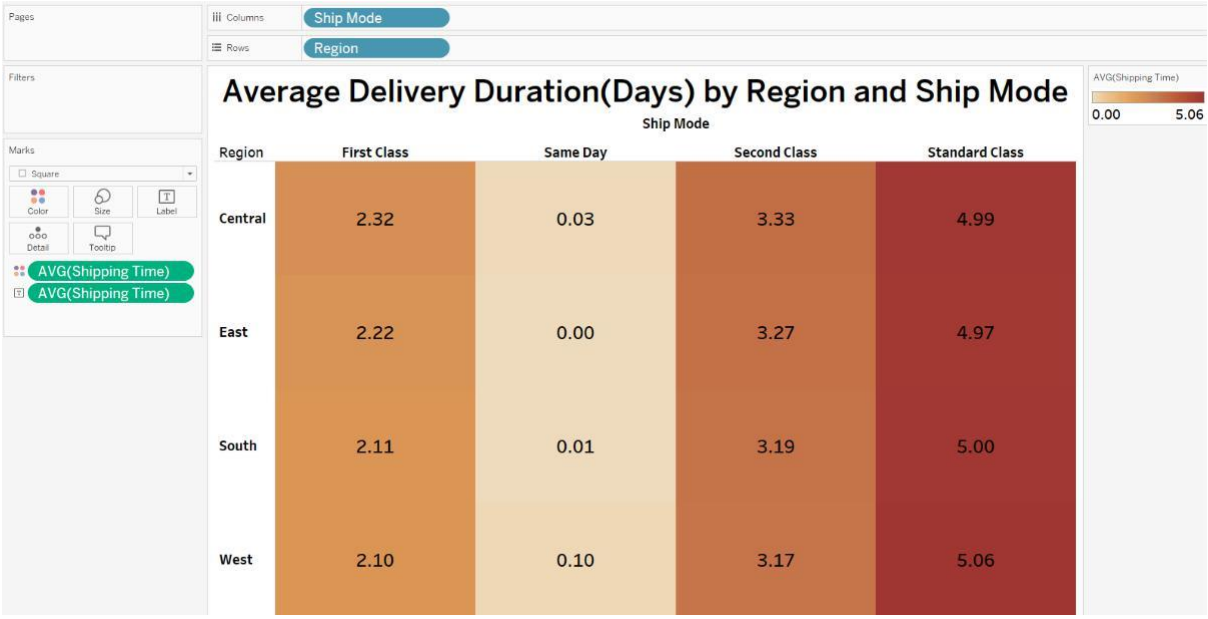
The scatter plot is an excellent choice for displaying sales and profit trends across different product subcategories and regions because it allows for multidimensional analysis within a single visualisation. In this chart the position of each bubble on the y-axis provides immediate insight into the profitability of each subcategory within a region, clearly separating profitable from unprofitable items.

The size of the bubbles represents the volume of sales, enabling a quick visual assessment of which subcategories and regions are driving the most revenue. The colour coding by region allows for easy segmentation and comparison of regional performance within the same subcategory. The scatter distribution highlights the variance in performance across regions, showing where strategies may need to be adjusted.

This plot shows that while Phones have a high sales volume across regions, Copiers yield high profitability despite lower sales volumes, indicating higher margins. Tables consistently show losses in all regions, pointing to potential issues in pricing or costs.

20. What is the average delivery duration for different regions and ship modes?

Answer :



The highlight table chart is a great way to show the average delivery duration by region and ship mode using color intensity. This makes it easy to see patterns and compare data. The chart uses different shades of color to show delivery times—darker shades for longer times and lighter shades for shorter times.

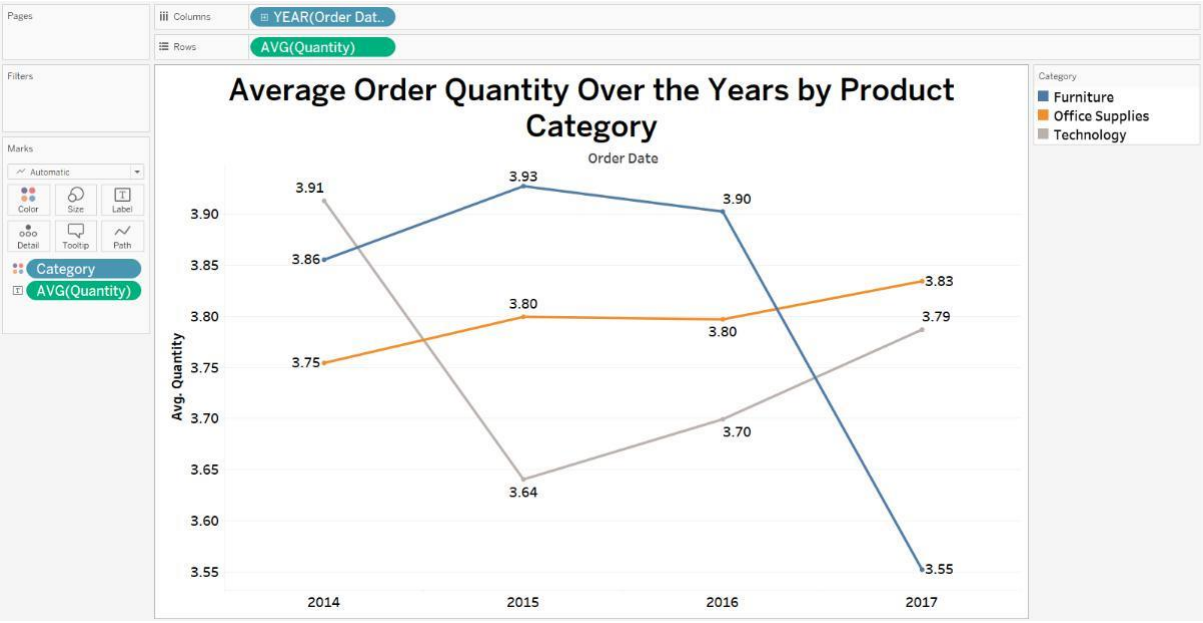
This format helps you quickly understand the data, making it a good choice for showing delivery metrics clearly and accessibly.

In this highlight table chart, First Class deliveries take between 2.10 and 2.32 days, with Central being the slowest and West the fastest. Same Day shipping is almost immediate in all regions except for the West, which is 0.10 days.

Second Class deliveries take between 3.17 and 3.33 days, with Central having the longest times. Standard Class shipping takes the longest, ranging from 4.97 to 5.06 days, with the West experiencing the longest delivery times in this category.

21. How has the average order quantity changed over the years for various product categories?

Answer :



The line chart is a strong choice for visualising how the average order quantity has changed over time because it clearly displays trends and allows for easy comparison across different product categories. Its ability to represent continuous quantitative data over a time series makes it simple to observe increases, decreases, or stable patterns in the data.

This line chart indicates that from 2014 to 2017, Furniture experienced a decline in average order quantity with a peak in 2015, Office Supplies remained relatively stable with a slight overall increase, and Technology showed volatility with a sharp drop in 2015 followed by a partial recovery in 2017.

22. Can we visualise the correlation between discount rates and order quantities for different customer segments?

Answer :

The scatter plot is great for showing the possible link between discount rates and order quantities among different customer segments. It plots individual data points, making it easy to see how these two variables are related.

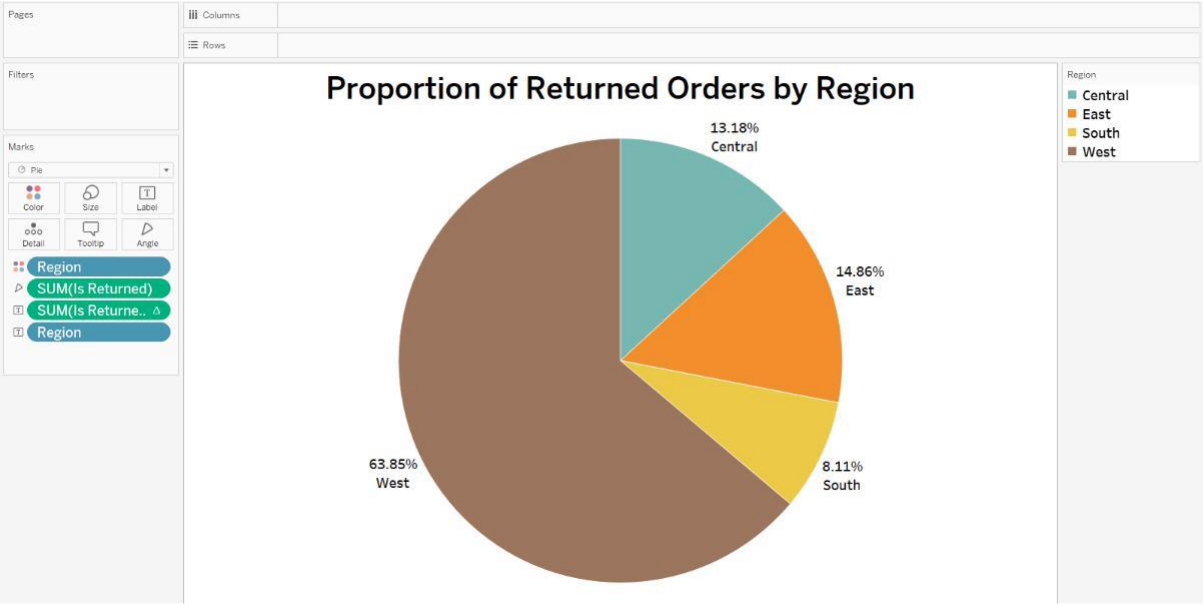
This type of chart helps identify patterns, trends, clusters, and outliers. Different colors represent each customer segment, making it simple to see and compare their trends.

The scatter plot shows a positive correlation across all customer segments, meaning higher discounts tend to lead to larger orders. This trend is strongest in the Consumer segment, indicating they are very responsive to discounts.

The Corporate segment shows a moderate correlation, suggesting they have a balanced response to discounts. The Home Office segment has the weakest correlation, indicating they are less influenced by discounts and may consider other factors when making purchase decisions.

23. What is the proportion of orders returned in each region within the Superstore dataset?

Answer :



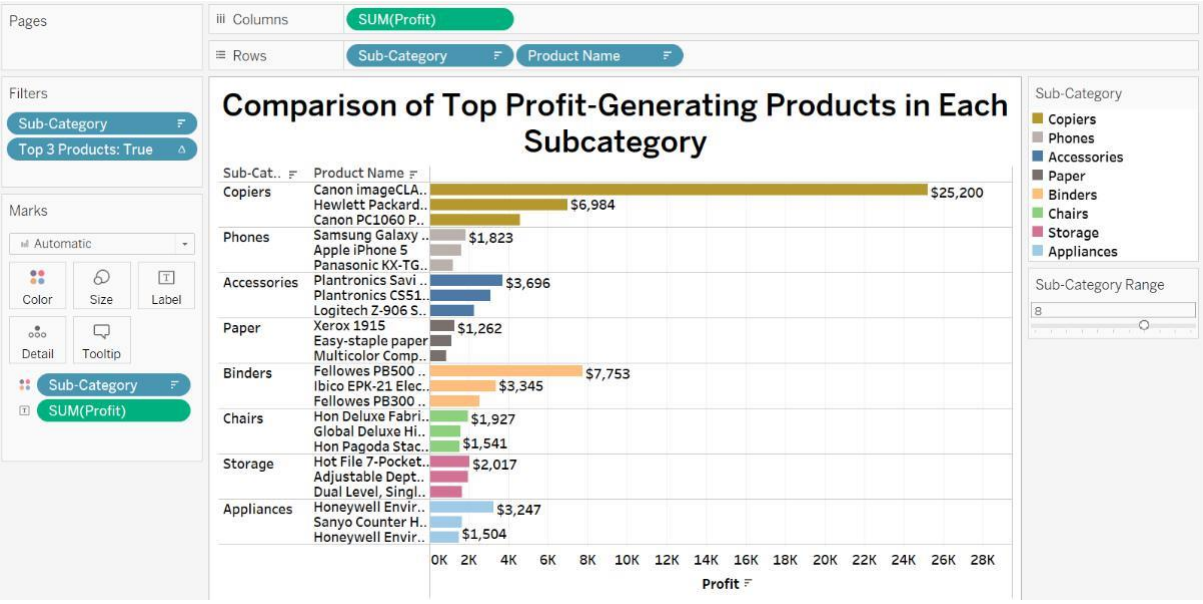
The pie chart is an effective visualisation tool for displaying the proportion of returned orders by region within the Superstore dataset because it illustrates parts of a whole in an intuitive manner. Each slice of the pie represents the percentage of the total returns that are attributable to a specific region, allowing for an immediate visual comparison.

This format is particularly useful when the number of categories is limited, as is the case with the regions here, which makes the chart easy to read and interpret. The size of each slice quickly conveys the relative magnitude of returns for each region, making it clear which regions have higher or lower return rates.

The calculated field named "Is Returned" effectively distinguishes returned orders within the dataset, where it is set to 1 for each returned order and 0 otherwise. The pie chart using this field reveals that the West region has the highest proportion of returns at 63.85%, the East follows with 14.86%, the Central region has 13.18%, and the South holds the smallest share with 8.11% of the total returned orders.

24. Can you compare the profit of different products for different subcategories?

Answer :



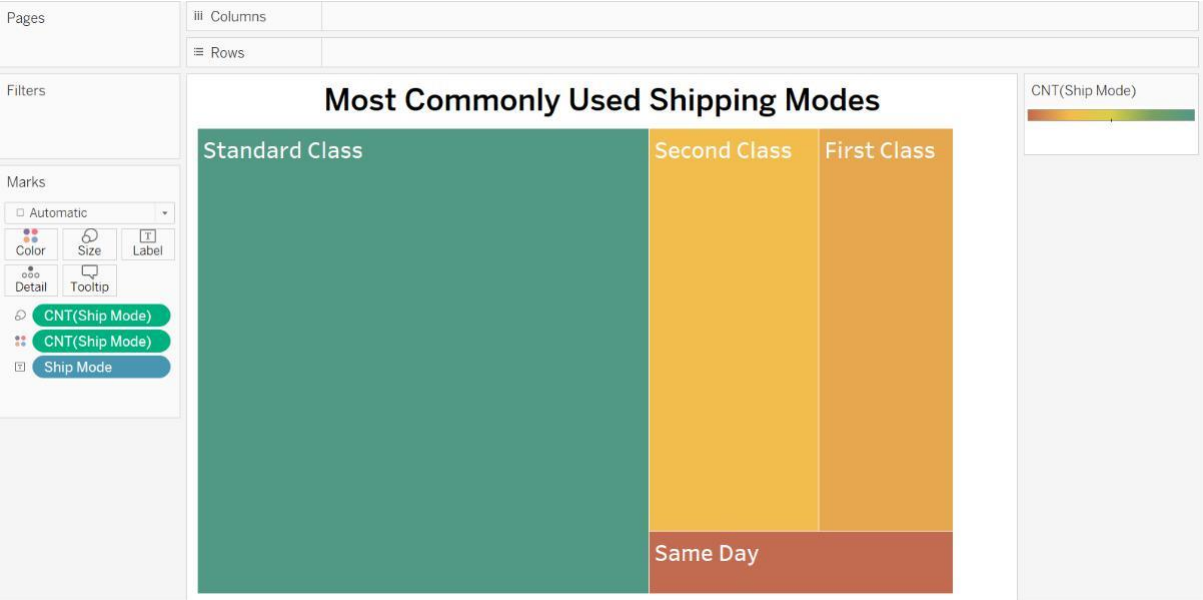
The horizontal bar chart is an excellent choice for comparing profits of different products across subcategories due to its clear and organised display.

This type of chart is particularly effective for showing rankings or comparisons across multiple products, as the length of each bar intuitively indicates the value of the profit, allowing for quick visual assessment. Additionally, the horizontal layout accommodates the text labels for the product names without clutter, making it easy to read even when dealing with longer names.

By using a parameter to control the number of subcategories displayed, we can customise the view to focus on more or fewer groups as needed, enhancing the chart's flexibility. Furthermore, the use of a calculated field to filter and display only the top three products ensures that the visualisation is not overcrowded and focuses attention on the highest profit-generating items.

25. Which shipping mode is the most commonly used in the Sample Superstore dataset?

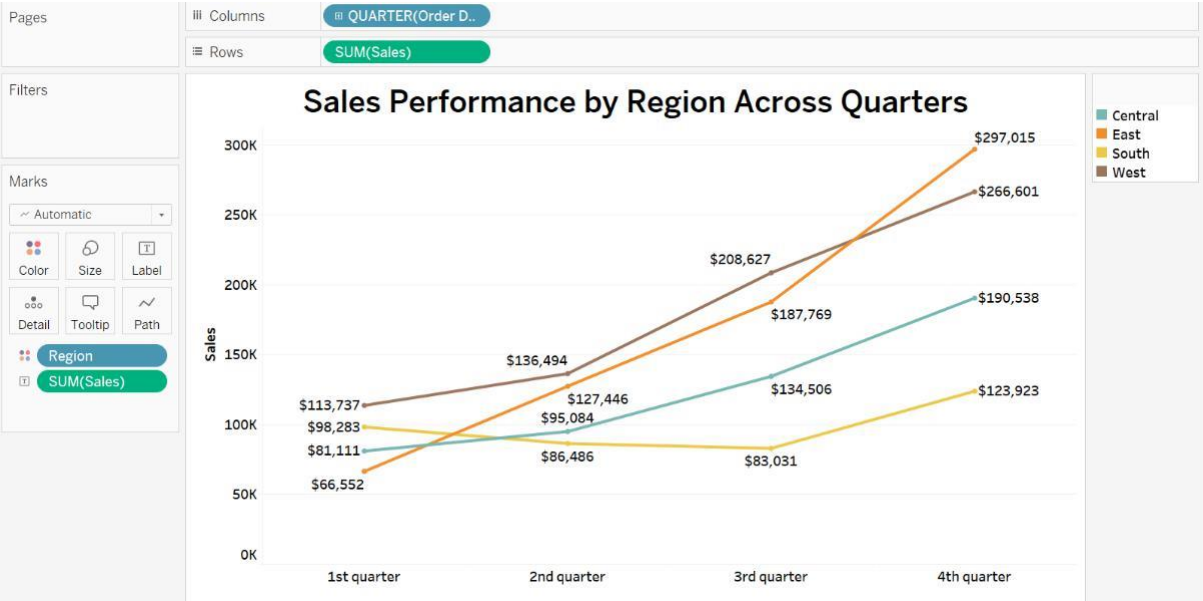
Answer :



A treemap is a great way to show the most used shipping modes in the dataset. It uses larger rectangles for more frequently used modes, making it easy to compare their usage at a glance.
Each shipping mode's rectangle size matches how often it is used.
In this treemap, "Standard Class" has the largest rectangle, showing it is the most used shipping mode. Smaller rectangles for "Second Class," "First Class," and "Same Day" indicate these modes are less common.
This visual method is very effective for quickly understanding the distribution of shipping modes without needing to look at numbers. The large "Standard Class" rectangle instantly shows its dominance in shipping mode preference.

26. How does the sales performance of different regions evolve throughout the quarters of a year?

Answer :



The line chart is well-suited for visualising the sales performance of different regions across the quarters of a year due to its ability to clearly display trends over time. In the chart, the temporal progression is easily followed along the x-axis, with each line's upward or downward trajectory illustrating the change in sales over time for each region.

Sales in the East region consistently rose over the year, culminating with the peak sales in the 4th quarter. The West region, beginning the year with the highest sales, maintained an upward trend and finished just behind the East in the final quarter.

Both the South and Central regions experienced growth, but the Central region edged out with slightly higher sales than the South by the 4th quarter, leaving the South at the lowest sales position at year's end.

27. What is the distribution of order priorities across different product categories?

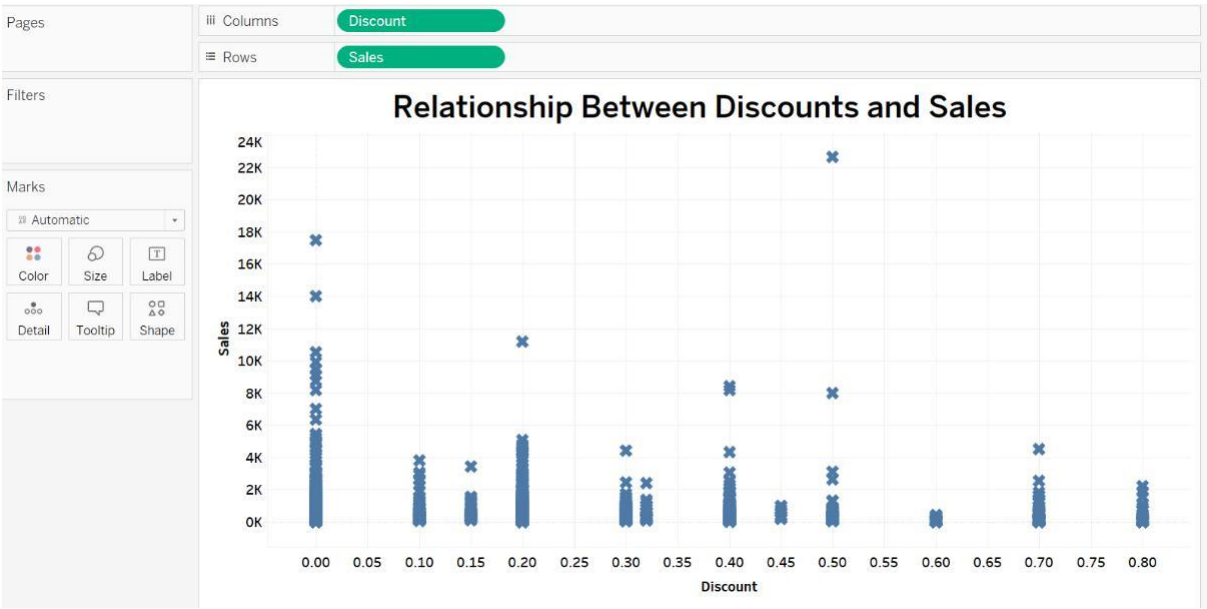
Answer :

The highlight table chart is an effective choice for visualising the distribution of order priorities across different product categories because it combines the simplicity of a table with the visual power of colour coding. This format allows for immediate recognition of patterns and comparisons: higher quantities are instantly identifiable by deeper colour shades, enabling quick comparison across categories and priorities. The 'Order Priority' calculated field reclassifies shipping modes into a hierarchy of urgency: 'Same Day' as 'Top Priority', 'First Class' as 'High Priority', 'Second Class' as 'Medium Priority', and all other shipping modes as 'Standard Priority'.

This chart illustrates that 'Standard Priority' is the most common shipping option selected across all product categories, with Office Supplies registering the highest number of orders, particularly under 'Standard Priority'. 'High Priority' and 'Top Priority' options are the least favoured among customers in all categories, suggesting a lower demand for expedited shipping. The Technology category has the fewest 'Top Priority' orders, indicating a minimal need for rapid delivery in this segment, while Furniture follows the overall trend, preferring 'Standard Priority' but with fewer orders than Office Supplies.

28. What is the relationship between discounts and sales?

Answer :



A scatter plot is great for showing the relationship between two continuous variables, like discounts and sales. It clearly displays how data points are spread out, helping to identify patterns, trends, and outliers.
In this scatter plot, we see that there isn't a strong link between the discount level and total sales.
There are higher sales at lower discount levels, but there are also some significant sales around the 0.5 discount level. This means that a small discount can be effective in boosting sales, and a large discount may not always be necessary.
Discounts can work better for some products than others.

29.How does the average order value differ between repeat customers and new customers?

Answer :

The bar chart is a great way to compare the average order values of new and repeat customers because it shows data in clear, separate categories. This makes it easy to see the differences between 'New' and 'Repeat' customers at a glance.

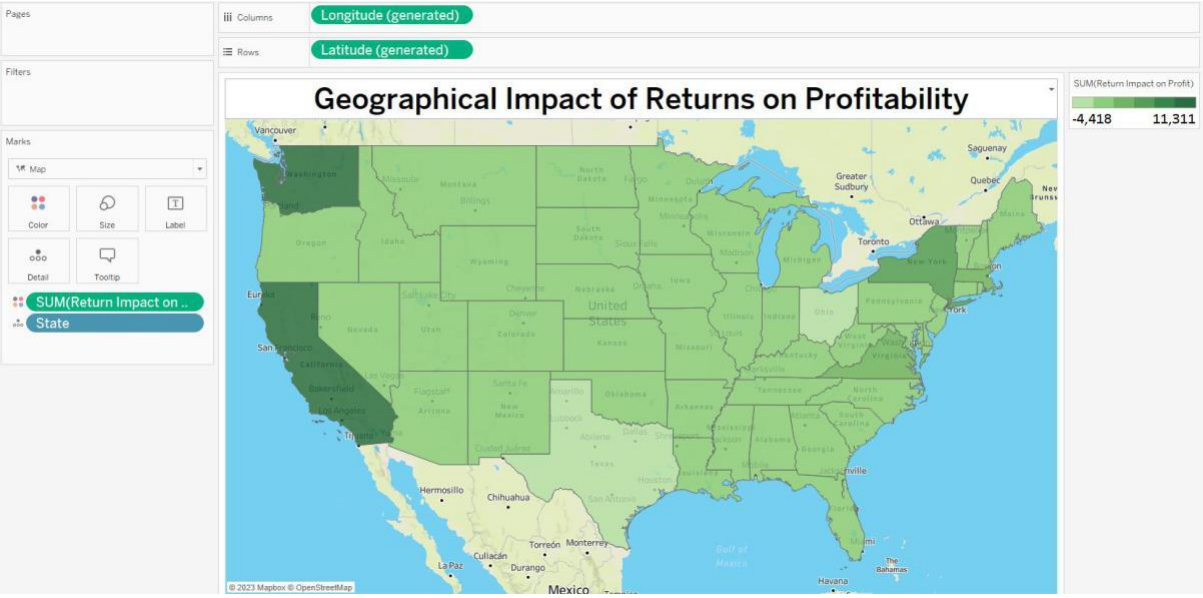
The average values are easy to spot, and the chart is simple and easy to understand, making it suitable for everyone.

In this chart, a customer is labeled as 'New' if their order date is their first recorded order. Any orders after that from the same customer ID are labeled as 'Repeat'.

The chart shows that new customers have a higher average order value ($243) compared to repeat customers ($227). This suggests that first-time buyers might be making larger purchases, possibly due to marketing strategies or special introductory offers.

30. What is the geographical distribution of returns and its impact on overall profitability?

Answer :



The map chart is a great way to show the geographical distribution of returns and their impact on profitability because it provides an easily recognizable spatial context.

It lets stakeholders quickly see which regions are most affected by returns, showing a clear link between location and financial performance. Using color gradients to represent different levels of profit impact makes it even clearer, helping to quickly identify areas that might need more attention.

The calculated field 'Return Impact on Profit' focuses only on the profit from returned items, letting us see the specific effect of returns on profitability. This map shows a general trend of higher return impacts on profitability in the northern and western parts of the United States, and lower impacts in the southern and eastern parts, with some exceptions like New York and Virginia.

Analysis By : Ashwini Suryakar

Email : ashusuryakar09@gmail.com

Workbook :

https://docs.google.com/document/d/1aGMxOkqVL24HeOKkQfCWdLrmruasOAmQ/edit?usp=sharing&ouid=100606171098247052792&rtpof=true&sd=true